

Chapter Nine

Designing Learning for All Learners

Companion Materials

Designing inclusive digital learning experiences requires more than awareness—it requires the right tools, frameworks, and collaborative practices. The companion resources for this chapter offer educators practical supports to apply principles of Universal Design for Learning (UDL), select assistive technologies, and differentiate instruction for diverse learners.

Videos & Media

- Ensuring That Instruction Is Inclusive for Diverse Learners
<https://www.edutopia.org/article/ensuring-instruction-inclusive-diverse-learners/>
- 'What is UDL?' – CAST's overview video on Universal Design for Learning
<https://www.cast.org/impact/universal-design-for-learning-udl>

Tools & Templates

- Assistive Tech Evaluation Checklist – Assess and select appropriate AT tools
<https://www.atia.org/learning-center/>
- Accessibility Walkthrough Tool – Audit your classroom or website for accessibility
<https://aem.cast.org/create/creating-accessible-documents>

Online Course Accessibility Checklist

Use this checklist as part of your course design routine. Accessibility is foundational to equity in digital learning.

1. Multimedia & Visuals

- ☐ All videos include captions.
- ☐ Audio content has transcripts available.
- ☐ Images and graphics include descriptive alt text.
- ☐ Animations and motion effects do not flash/flicker in ways that could trigger seizures.

2. Text & Layout

- ☐ Headings use proper styles (H1, H2, H3) for screen reader navigation.
- ☐ Lists and tables are structured correctly (not created with tabs or spaces).
- ☐ Text is written in clear, simple language without unnecessary jargon.
- ☐ Fonts are legible, and text can be resized without loss of content.

3. Color & Contrast

- ☐ Text and background meet WCAG contrast guidelines (minimum 4.5:1).
- ☐ Color is not used as the only method to convey meaning (e.g., “press the red button”).

4. Navigation & Operability

- ☐ Course can be navigated using a keyboard alone.

- ☐ Hyperlinks are descriptive (e.g., “Download Assignment 1” instead of “Click here”).
- ☐ Pages and modules follow a consistent and predictable layout.
- ☐ Instructions, assignments, and due dates are easy to locate.

5. Compatibility & Flexibility

- ☐ Course materials are accessible across devices (desktop, tablet, smartphone).
- ☐ Files are provided in multiple formats (HTML, accessible PDF, audio, etc.).
- ☐ LMS accessibility checker has been run, and flagged issues resolved.

6. Equity & Inclusion

- ☐ Content aligns with UDL principles (multiple means of engagement, representation, expression).
- ☐ All resources work with assistive technology (e.g., screen readers, speech-to-text).
- ☐ Bandwidth-friendly options are available (e.g., downloadable text, low-res videos).

Student-Friendly Online Course Accessibility Checklist

Your online course should be designed so everyone can learn and participate fully. Here are some things you should expect to see:

Videos & Audio

- Videos have captions you can read.
- Audio recordings come with written transcripts.

Images & Graphics

- Pictures and charts have short descriptions so you know what they show.

Text & Reading

- Headings and titles are clear so you can find information easily.
- Text is easy to read and understand.
- You can make the text bigger or smaller without losing information.

Colors & Design

- Text and background colors have good contrast (easy to see).
- Color isn’t the only way information is shared (not just “click the red button”).

Navigation & Links

- You can move through the course using just the keyboard if needed.
- Links tell you where they go (like “Download Assignment” instead of “Click here”).
- The course looks organized, with clear pages, modules, and instructions.

Devices & Formats

- You can open course materials on a computer, tablet, or phone.
- Files come in different formats (PDF, online, sometimes audio).
- The school checks for accessibility issues before the course starts.

Fair Access for Everyone

- The course offers different ways to learn (watch, read, listen, create).
- Materials work with assistive technology like screen readers.
- There are options for low internet (like downloadable text or smaller video files).

Recommended Readings

U.S. Department of Education (2024). *National Education Technology Plan*.

<https://tech.ed.gov/netp/>

→ The NETP emphasizes accessibility, equity, and inclusive digital design across all learning environments.

Zhou, L., Smith, D. W., Parker, A. T., & Griffin-Shirley, N. (2021). Assistive technology use and needs of students with visual impairments in the United States. *Journal of Visual Impairment & Blindness*, 115(2), 135–148. <https://journals.sagepub.com/home/jvb>

→ Offers empirical insights into matching AT tools to learner profiles in real-world settings.